

MAP SHOWING THE DISTRIBUTION OF CRETACEOUS ON WESTERN LONG ISLAND, NEW YORK

By A. C. Veatch

1904

Scale

0 5 10 miles

LEGEND

- |                            |                                    |  |   |   |                                      |  |                                      |  |
|----------------------------|------------------------------------|--|---|---|--------------------------------------|--|--------------------------------------|--|
|                            |                                    |  |   |   |                                      |  |                                      |  |
| Outcrops of the Cretaceous | Area of Cretaceous above sea level | Approximate contours of Cretaceous surface | Points at which the Cretaceous was encountered, with elevation in feet above or below sea level | Points at which the Cretaceous was not encountered, with elevation in feet above or below sea level | Cretaceous fossils, shells, in place | Cretaceous fossils, shells, not in place | Cretaceous fossils, leaves, in place | Cretaceous fossils, leaves, not in place |









A. MANNETTO GRAVEL NEAR TOP OF MELVILLE SECTION.



B. CRETACEOUS SAND NEAR BASE OF MELVILLE SECTION.









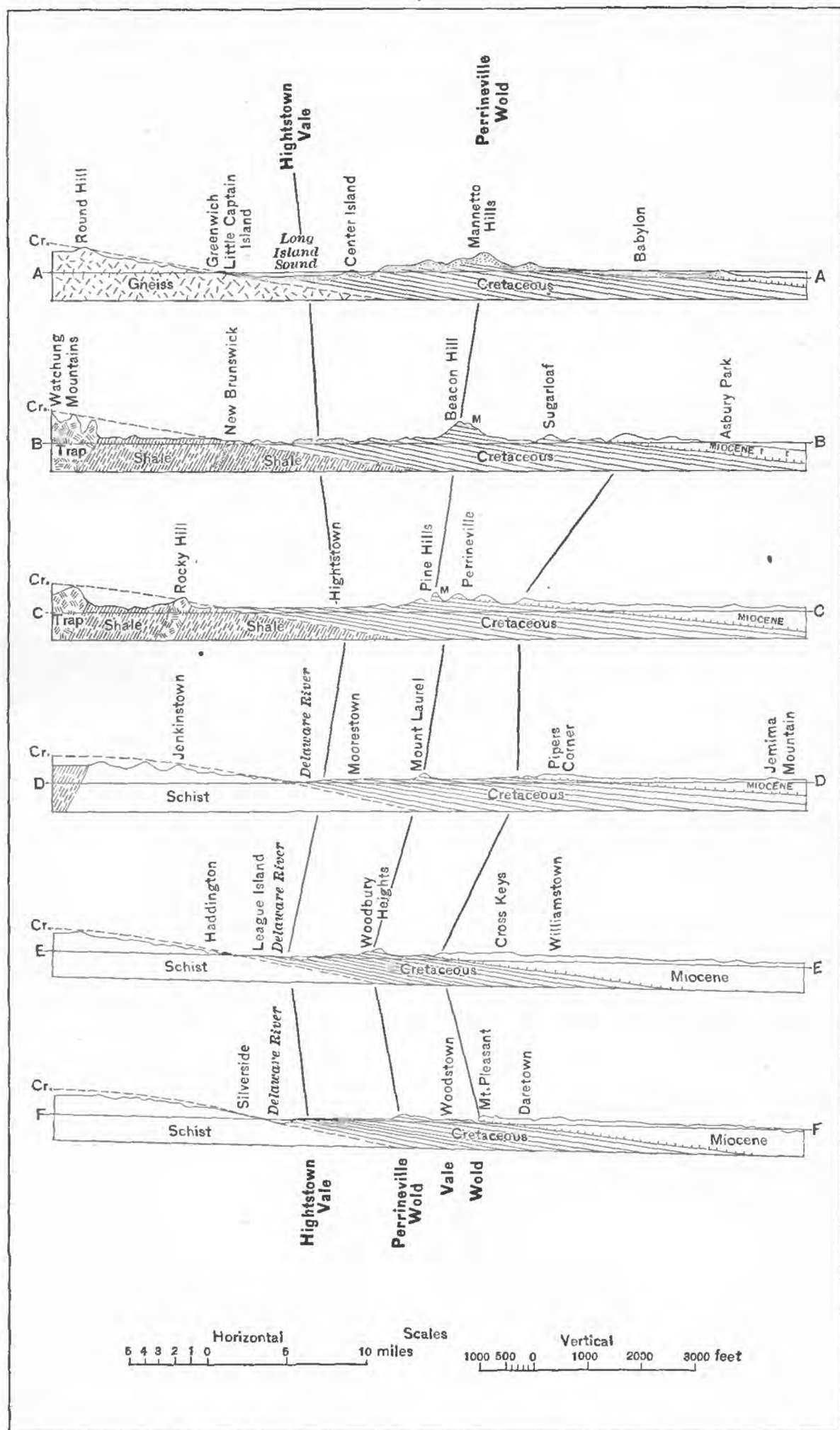












COMPARATIVE CROSS SECTIONS OF LONG ISLAND AND NEW JERSEY ALONG LINES SHOWN IN FIGURE 8, SHOWING RELATIONS OF THE TOPOGRAPHIC FEATURES.

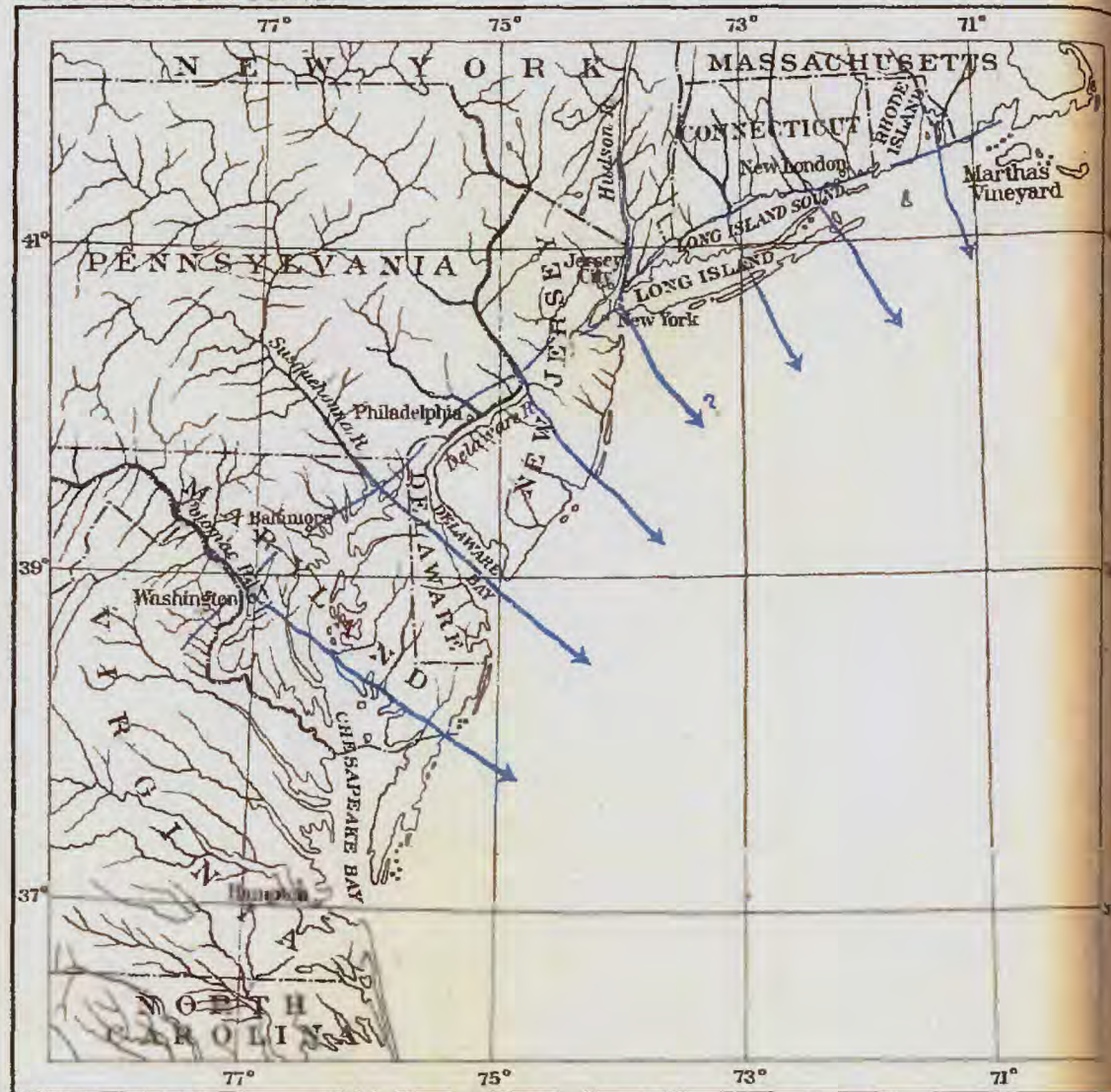
By A. C. Veatch, 1904.

Dotted portion of sections A-A and B-B represents Pleistocene deposits. Broken line marked Cr. shows pre-Cretaceous peneplain.

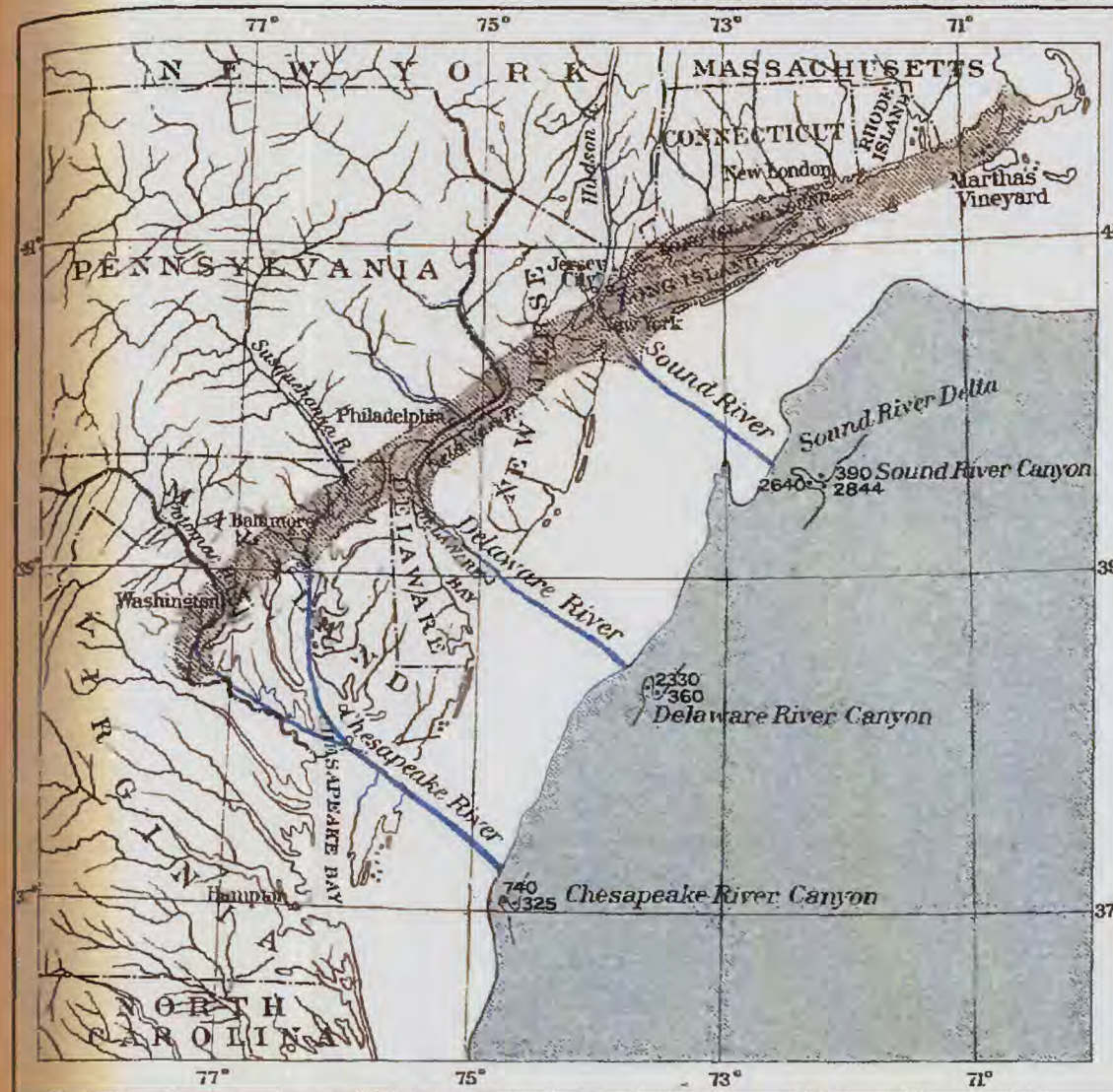








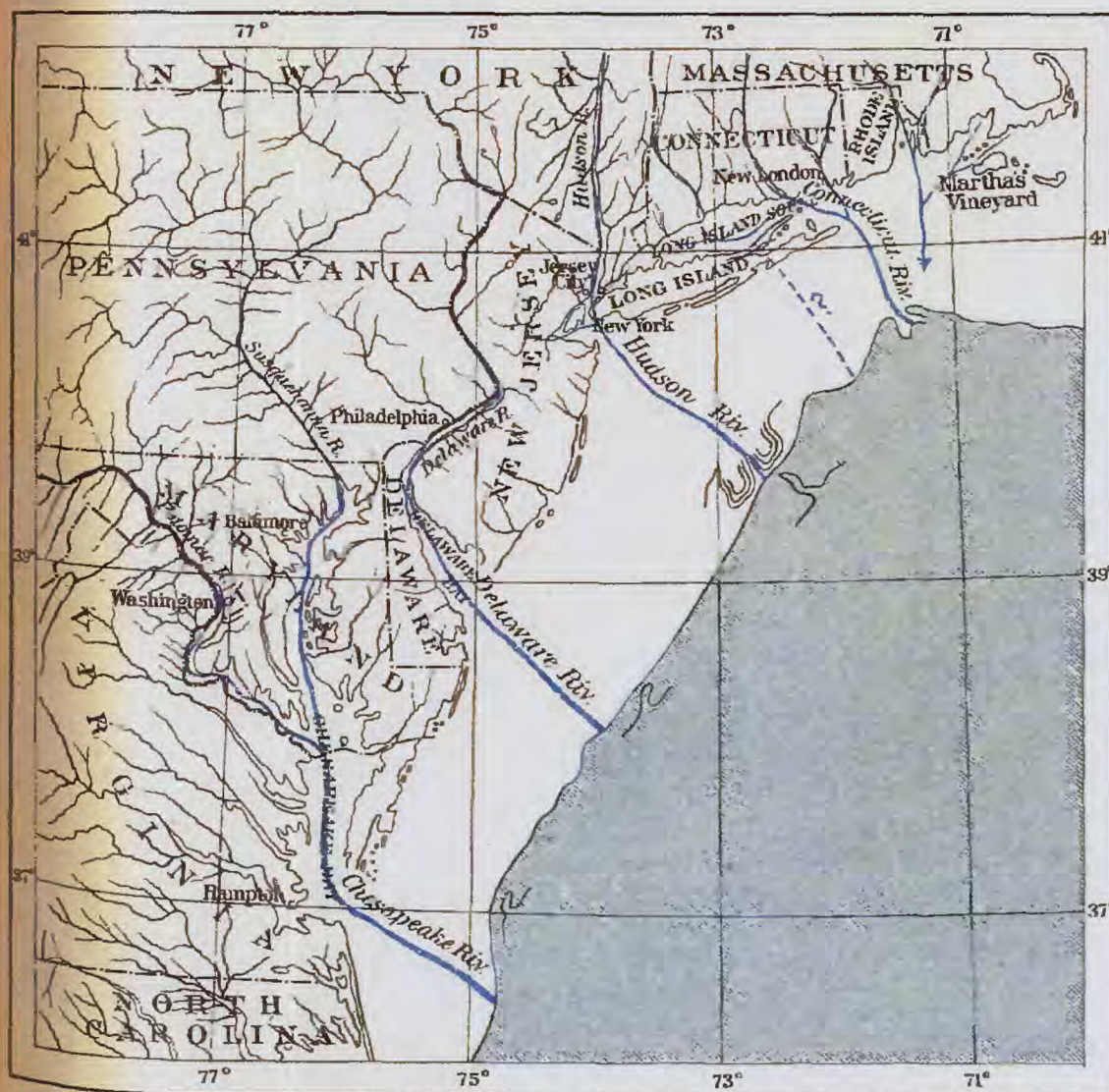
(A) POST-MIOCENE EROSION INTERVAL



(B) POST-LAFAYETTE EROSION INTERVAL



(C) POST-MANNETTO EROSION INTERVAL



(D) VINEYARD EROSION INTERVAL

DEVELOPMENT OF MAJOR DRAINAGE OF NORTH ATLANTIC COASTAL PLAIN

LEGEND

- Present drainage and shore lines
- Former drainage and shore line
- Canyons of the coastal shelf
- Cretaceous outcrops
- Soundings in feet below present sea level



















LANDSLIPS DUE TO PARTIAL UNDERMINING OF CLIFF FACE BY OCEAN AT THE BROKEN GROUNDS, OR RAGGED GROUND, NEAR FRESH POND, NORTHEAST OF HUNTINGTON, NORTH SHORE OF LONG ISLAND.

Photograph by Edward P. Buffet.









*A*



*B*

HORIZONTALLY STRATIFIED TISBURY (MANHASSET) SAND AND GRAVEL BEDS, WITH INCLUDED LAYER OF BOWLDER CLAY (DARK-COLORED BAND), MANHASSET BOWLDER BED, KING'S SANDPIT, HEMPSTEAD HARBOR, N. Y.











A. PORTION OF THE HARBOR HILL OUTWASH PLAIN OVER THE TISBURY TERRACE,  
SOUTH OF HUNTINGTON, N. Y.

The West and Half Hollow hills in the distance mark the southern limit of the ice and represent a portion of the  
Pernneville Wold with a slight morainal covering.



B. BOWLDERY PORTION OF THE HARBOR HILL MORaine NEAR CREEDMOOR, N. Y.









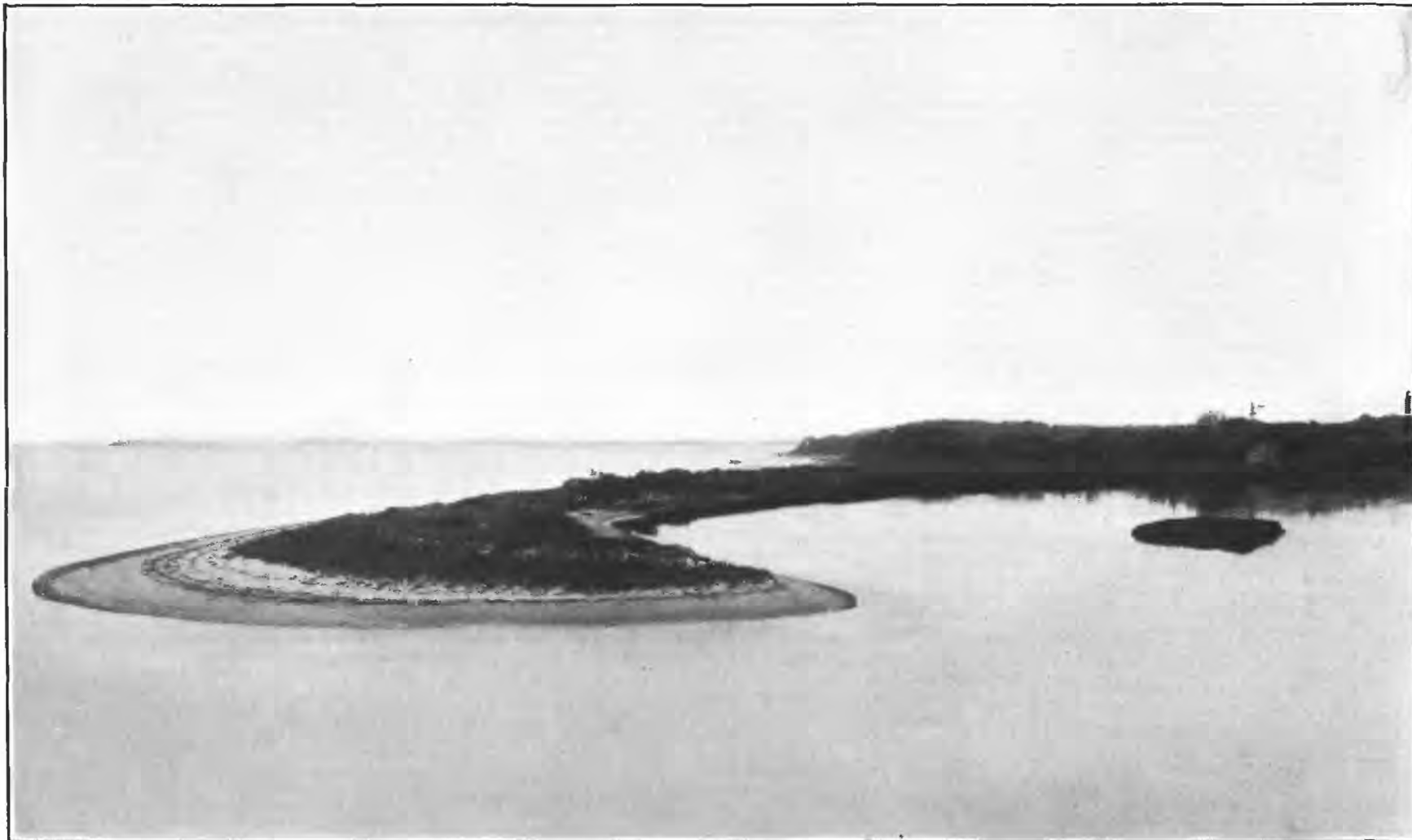












HOOKED SAND SPIT AT ENTRANCE TO SMITHTOWN HARBOR, LONG ISLAND.

An illustration of a recent change in the shore line. Photograph by Edward P. Buffet.







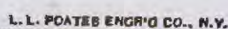












Showing position of the main ground-water table and of several perched water tables on July 1, 1903. Shaded areas are water-logged. Compiled from sections by Walter E. Spear, division engineer, New York City commission on additional water supply.























A BURGESS WELL, OYSTER BAY.

Water rises to within 1 foot of top of pipe. Rod projecting above pipe is aluminum gage used in observations on tidal fluctuations.



B. JONES WELL, COLD SPRING HARBOR.

Water flows freely over elbow in pipe.

VIEWS SHOWING HEAD DEVELOPED IN THE NORTH SHORE ARTESIAN WELLS.



HEAD DEVELOPED IN A 40-FOOT ARTESIAN WELL BELONGING TO THE CITIZENS' WATER-SUPPLY COMPANY NEAR DOUGLASTON, N. Y.

Water rises to within 1.5 feet of top of pipe. Box contains automatic gage used in study of the tidal fluctuations in this well.























































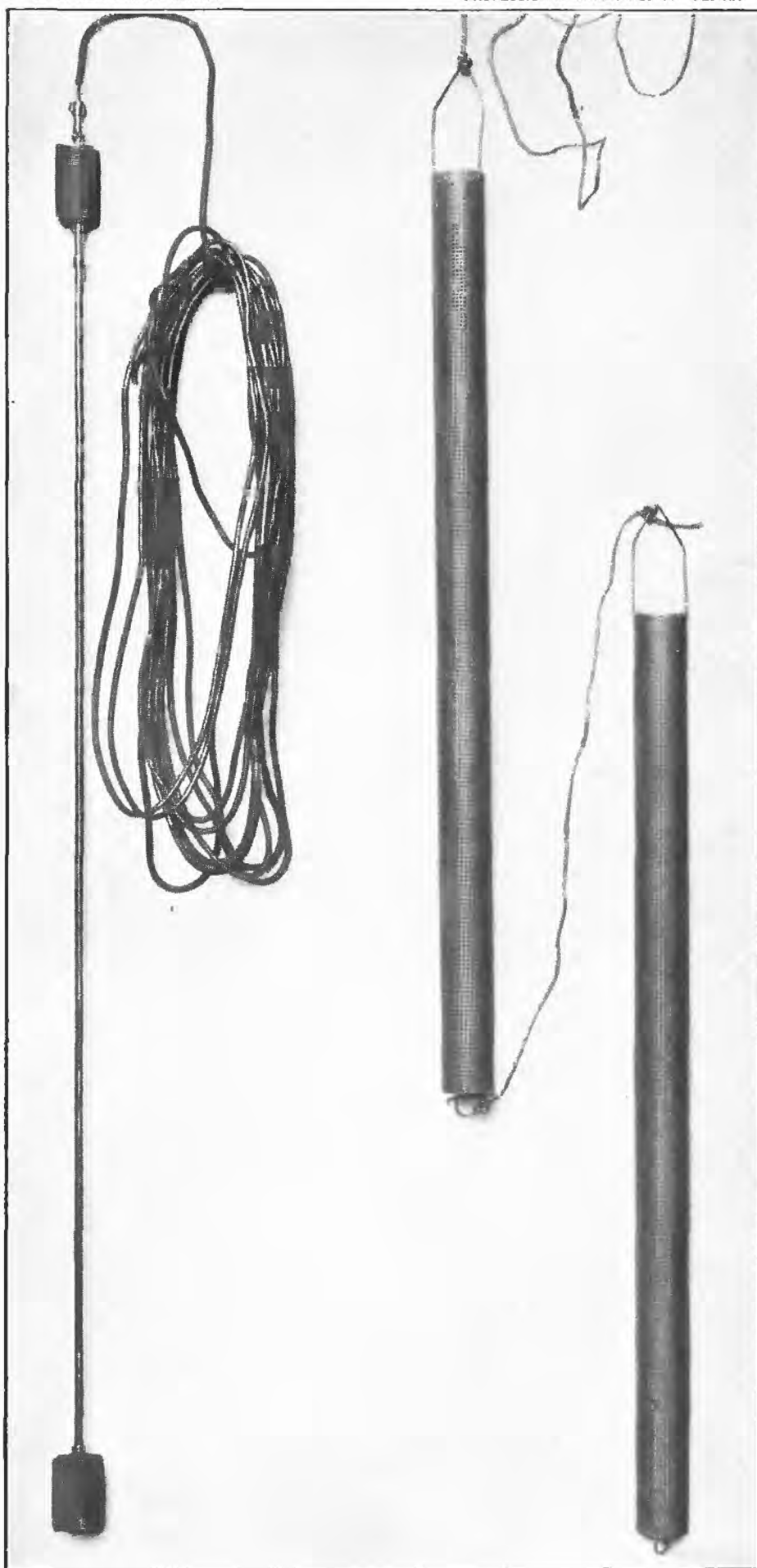








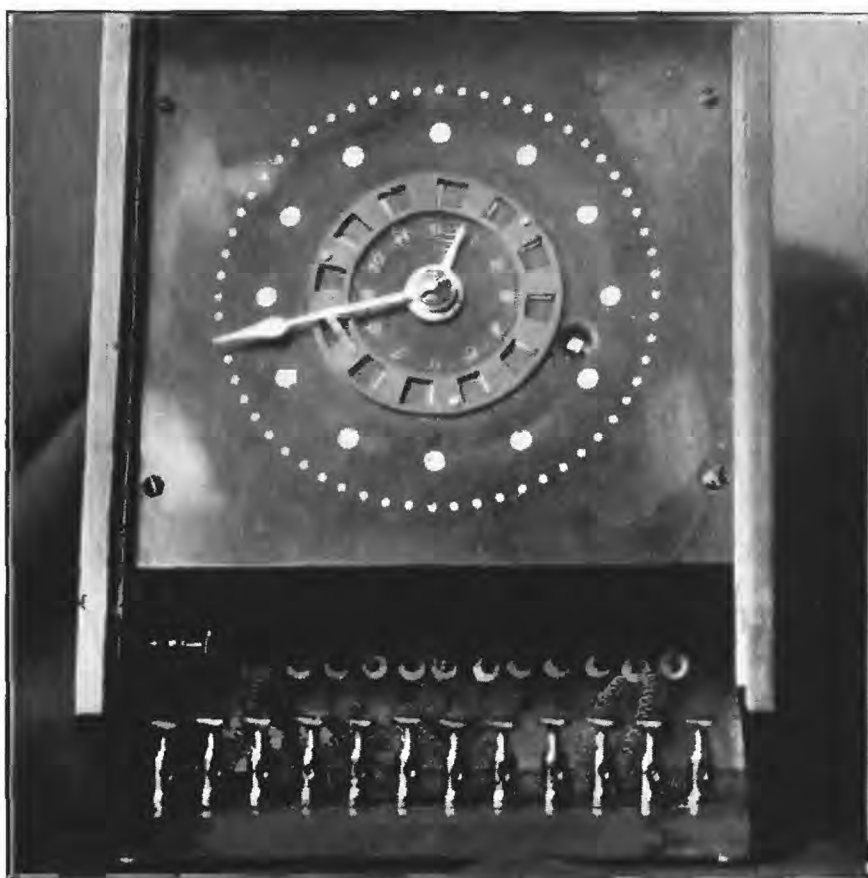




ELECTRODE AND PERFORATED BRASS BUCKETS USED IN CHARGING  
WELLS.



A. UNDERFLOW METER, SHOWING CONNECTIONS WHEN USED AS DIRECT-READING APPARATUS.



B. COMMUTATOR CLOCK FOR USE WITH RECORDING AMMETER.





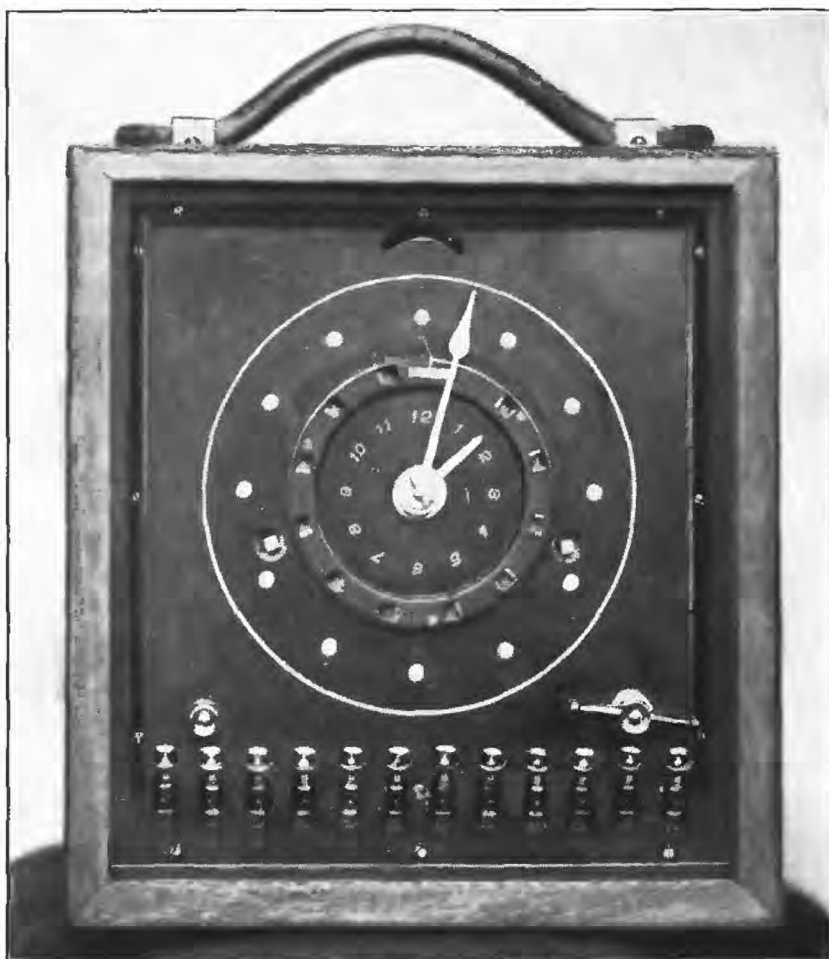












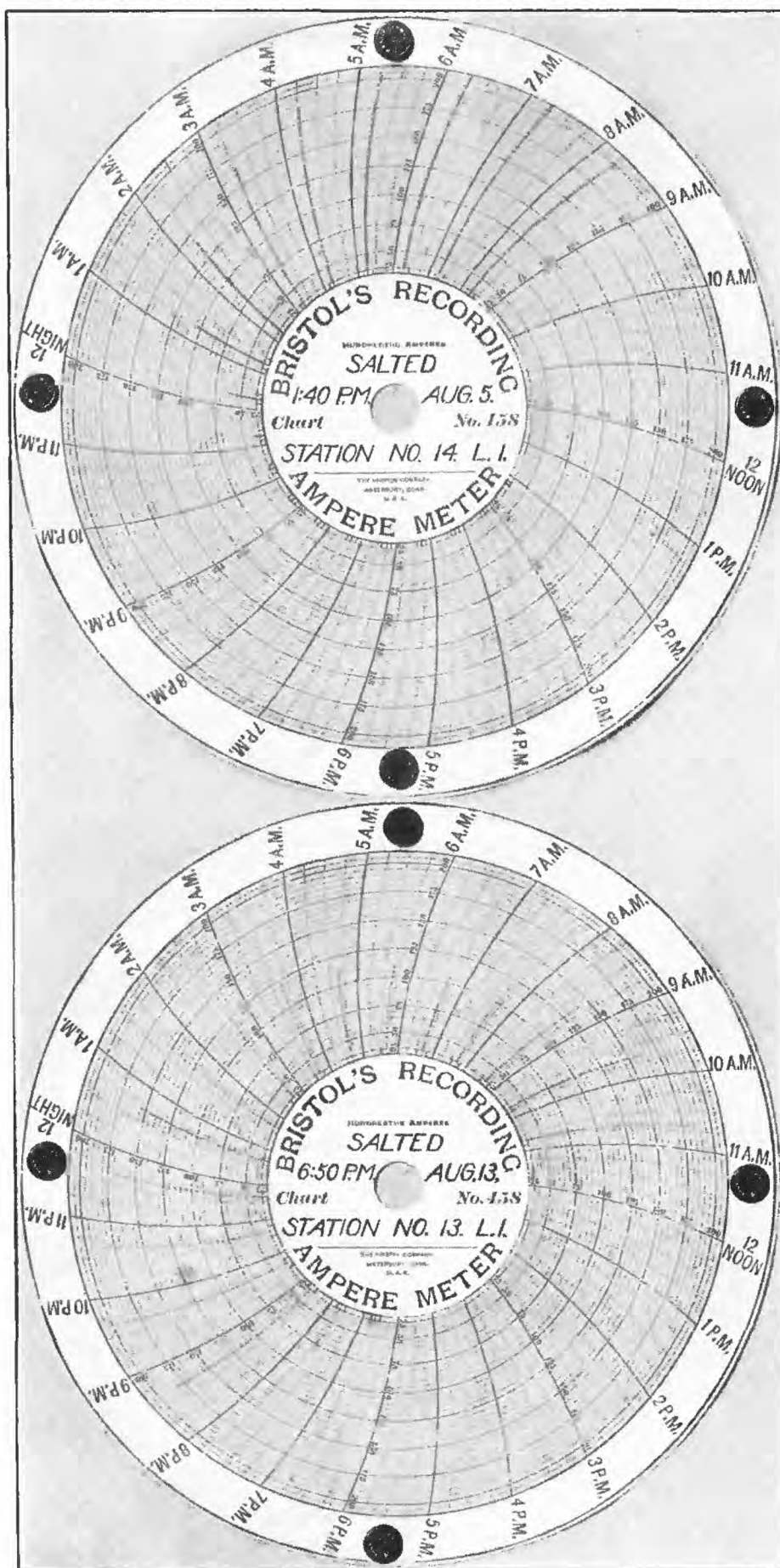
A. COMMUTATOR CLOCK FOR USE WITH RECORDING AMMETER.



B. RECORDING AMMETER, COMMUTATOR CLOCK, AND BATTERY BOX IN USE IN THE FIELD.







CHARTS MADE BY RECORDING AMMETER.

















































































































































































































































































































































































































































































































































































































































































































